

**REMARKS**

Entry of the foregoing, reexamination and reconsideration of the subject application are respectfully requested in light of the amendments above and the comments which follow.

As correctly noted in the Office Action Summary, claims 1-21 were pending and await further consideration on the merits. By the present response, claims 1, 2, 4, 6, 20 and 21 have been amended, and claims 22-24 have been added. Thus, upon entry of the present response, claims 1-24 are pending and await further consideration on the merits.

Support for the foregoing amendments can be found at least at the following locations in the original disclosure: page 13, lines 1-26; and the original claims.

***CLAIMS REJECTIONS UNDER 35 U.S.C. § 102***

Claims 1-4, 7-12, 14-15 and 20-21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,049,349 to McCullough et al. (hereafter "*McCullough et al.*") on the grounds set forth in paragraph 4 of the Official Action. This rejection, as it would be applied to the amended claims, is respectfully traversed.

The presently claimed invention is directed to improved articles comprising at least one rigid element and at least one element of a thermoplastic material, and associated methods. According to the present invention, such articles, and their associated methods, provide good dimensional stability and good impact behavior. For instance, the rigid element of such articles allows loads to be spread over the entirety, or large areas of, the

part of the article made of thermoplastic material. The rigid element can also serve to reinforce and/or stabilize the shape of the article (see, e.g.-page 4, lines 1-11).

An article formed according to the principles of the present invention is set forth in amended claim 1. Amended claim 1 recites:

*1. An article comprising a part comprising a rigid metal or thermoplastic element of elongate shape, at least one part of which has a cross section which has a profile defining a concave space, and comprising at least one part made of thermoplastic material associated with the rigid element and positioned in the concave space of the rigid element, wherein the part made of thermoplastic material is in contact on at least two lines which are continuous in the longitudinal direction, and in that the part made of thermoplastic material has a cross section comprising at least one hollow.*

According to another aspect, a method performed consistent with the principles of the present invention is set forth in amended claim 20. Amended claim 20 recites:

*20. A method for fabricating an article comprising at least one rigid metal or thermoplastic element a cross section of which has at least one part defining a concave space and comprising at least one element made of a molded thermoplastic material, comprising at least the following steps:*

- a) arranging, in an injection mold of chosen shape, a preformed rigid metal or thermoplastic element one cross section of which has at least one part defining a concave space,*
- b) injecting molten thermoplastic material into the mold, and*
- c) injecting a fluid or a gas, through a needle into the molten thermoplastic material present in the concave space of the rigid element.*

According to yet another aspect, a method performed consistent with the principles of the present invention is defined by amended claim 21. Amended claim 21 recites:

21. *A method for fabricating an article comprising at least one rigid metal or thermoplastic element a cross section of which has at least one part defining a concave space and comprising at least one element made of a molded thermoplastic material, comprising at least the following steps:*

- a) arranging, in an injection mold of chosen shape, a rigid metal or thermoplastic element that is to be preformed,*
- b) preforming the rigid element by pressing or by hot forming in the mold, the preform having a cross section which has at least one part defining a concave space,*
- c) injecting molten thermoplastic material into the mold, and*
- d) injecting a fluid or a gas, through a needle into the molten thermoplastic material present in the concave space of the rigid element.*

*McCullough et al.* fails to disclose the article and methods set forth in claims 1, 20 and 21.

*McCullough et al.* is directed to a method of making a blown bag-in-box composite container.

As discussed, for example, on lines 34-40 of column 1 of *McCullough et al.*:

In recent years, the food and beverage industry has turned to bag-in-box (BIB) composite containers to package such products as bulk milk and wine. These BIB containers, which basically consist of a plastic inner bag within a sturdy outer paperboard box, combine the low cost strength of paperboard with the protection offered by various plastics. (emphasis added)

Consistent with the above, *McCullough et al.* is clearly directed to the manufacture of articles comprising outer paperboard cartons or boxes:

In light of the above, a principle object of the present invention is to provide a bag-in-box composite container that is sturdy, relatively impermeable to gases, non-leaking and inexpensive to make. (column 2, lines 32-35) (emphasis

added). . . For example, carton 12 may be made of paperboard, corrugated board, or the like. . . (column 5, lines 10-14) (emphasis added)

By contrast, the presently claimed invention, as set forth, for example, in claims 1, 20 and 21, require a rigid element of metal or thermoplastic material.

Thus, *McCullough et al.* clearly fails to anticipate the presently claimed invention. Reconsideration and withdrawal of the rejection is respectfully requested.

***CLAIM REJECTIONS UNDER 35 U.S.C. § 103***

Claims 5, 13 and 16-19 stand rejected under 35 U.S.C. § 103(a) as being obvious over *McCullough et al.* on the grounds set forth in paragraph 6 of the Official Action.

This rejection is respectfully traversed.

It is acknowledged in paragraph 6 of the Official Action that *McCullough et al.* fails to disclose a U or I-shaped rigid outer element, the metal outer layer, or particular articles recited in claims 16-19. Nonetheless, it is asserted, that:

The use of a metal outer layer in the container of *McCullough* would be an obvious way to control the permeability of the container, since metal layers are known to inhibit the passage of gases into containers.

The above-quoted assertion is respectfully traversed.

First, to the extent the grounds for rejection rests upon assertions about features which "are known", yet cite no prior art references in support of these assertions, the rejection is respectfully traversed. Should the rejection be maintained, Applicants respectfully request that the Examiner furnish prior art references in support of the grounds

for rejection so that the teachings of the prior art can be properly evaluated in the context of the requirements of the presently claimed invention, and under the framework established by *Graham v. John Deere*.

Moreover, contrary to the above-quoted assertion, one of ordinary skill in the art would not have been motivated to make the proposed modification of *McCullough et al.* In fact, *McCullough et al.* clearly teaches away from the proposed modification.

As noted above, and as taught in column 2 of *McCullough et al.*, a principle objective of the invention described therein is to make use of the relatively inexpensive paperboard carton bag-in-box composite material. See, e.g.-column 2, lines 32,35. In this regard, *McCullough et al.* teaches away from containers made of metals:

In comparison, containers made from glass, metals, and some plastics are relatively impermeable to gases, but are rather expensive due to the high cost of those materials. (column 1, lines 30-33).

Thus, *McCullough et al.* clearly teaches away from the proposed modification.

There is yet another reason as to why one of ordinary skill in the art would not have been motivated to make the proposed combination. Namely, the inner plastic bag taught by *McCullough et al.* provides impermeability to the passage of gases. Thus, the substitution of a more expensive metal outer container for the paperboard carton taught by *McCullough et al.*, would not have been viewed as necessary, or justifiable, by those of ordinary skill in the art.

For at least the reasons noted above, reconsideration and withdrawal of the rejection is respectfully requested.

***ALLOWABLE SUBJECT MATTER***

Applicants note with appreciation the indication contained in paragraph 7 of the Official Action that claim 6 contains allowable subject matter.

***CONCLUSION***

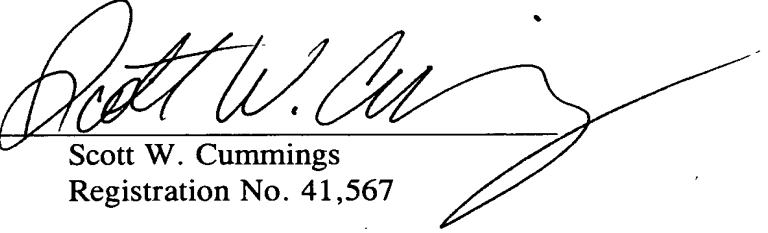
From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

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Date: July 17, 2003

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